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NTE1263 Integrated Circuit Record/Playback Circuit for VCR

Features:

- Recording/Playback Circuit with Minor Modifications in Peripheral Circuitry
- Wide Application: Capable of Mic. Mixing and Variable Sound Monitoring
- Wide Supply Voltage Range: 3V to 14V
- Built-in AGC Circuit of Wide Control Range and Low Distortion
- High Density Integration, Low Noise

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$, unless otherwise specified)

Supply Voltage, V_{CC}	14.4V
Circuit Voltage, V_{1-4}	1V
Circuit Voltage, V_{6-4}, V_{7-4}	3V
Circuit Voltage, V_{11-4}, V_{12-4}	14.4V
Circuit Voltage, V_{13-4}	9V
Supply Current, I_{CC}	38mA
Power Dissipation ($T_A \leq 70^\circ\text{C}$), P_D	550mW
Operating Temperature Range, T_{opg}	-20° to $+70^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 12\text{V}$, $f = 1\text{kHz}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage (Line Amp)	$V_{O(L)}$	$V_i = 2.5\text{mV}_{\text{const}}$ THD = 3% Output	2.8	3.2	–	V_{rms}
Output Voltage (Rec. Amp)	$V_{O(R)}$		2.8	3.2	–	V_{rms}
Total Harmonic Distortion	THD ₍₁₎	$V_i = 2.5\text{mV}_{\text{const}}$	–	0.1	0.3	%
Closed Circuit Voltage Gain	G_{VC}		62	66	70	dB
Open Circuit Voltage Gain (EQ Amp)	$G_{VO(E)}$		47	53	–	dB
Output Voltage (AGC)	$V_{O(1)}$	$V_i = 0.25\text{mV}_{\text{const}}$	0.35	0.55	0.70	V
	$V_{O(2)}$	$V_i = 25\text{mV}_{\text{const}}$, AGC 40dB	0.5	0.8	1	V
Total Harmonic Distortion (AGC)	THD ₍₂₎		–	0.2	1	%
Output Noise Voltage	V_{no}	$R_g = 2.2\text{k}\Omega$, $f = 20\text{Hz}$ to 20kHz	–	3	6	mV
Total Circuit Current	I_{tot}	AGC Circuit Off	–	21	30	mA
Input Impedance (EQ Amp)	$Z_{i(E)}$		–	100	–	$\text{k}\Omega$
Input Impedance (Tone Amp)	$Z_{i(T)}$		–	100	–	$\text{k}\Omega$

Pin Connection Diagram

